January 6, 2015

Ellis Koch
RXRGIP
1750 New Highway
Farmingdale, NY 11747

RE: Leachable Arsenic and Lead Sampling Work Plan – Garvies' Point Redevelopment Project

Dear Mr. Koch:

P.W. Grosser Consulting, Inc. (PWGC) has prepared this work plan to answer the following questions:

1. Could arsenic produce a leachate that exceeds the New York State Department of Environmental Conservation (NYSDEC) standards for discharge to groundwater; and
2. Could lead produce a leachate that exceeds the United States Environmental Protection Agency (USEPA) Resource Conservation and Recovery Act (RCRA) Hazardous Waste Classification?

The first question will be examined using the USEPA Synthetic Precipitation Leaching Procedure (SPLP), Method 1312; and the second would use the Toxicity Characteristics Leaching Procedure (TCLP) Method 1311.

Background

A subsurface investigation including sampling soil underneath the Dickson, Benbow, and Lounge buildings was performed by PWGC in 2014 which identified elevated levels of arsenic and lead in the subsurface soils. These constituents were previously identified as contaminants of concern by the USEPA in their 1999 Remedial Investigation Report and a site-wide cleanup level (SWCL) of 24 mg/kg for arsenic and 400 mg/kg for lead was established in the Li Tungsten Record of Decision (ROD). As detailed in the PWGC 2014 Pre-Construction Confirmatory/Insurance Data Gap Subsurface Investigation Report, total arsenic and lead was detected above the ROD SWCLs in several soil borings across the site (**Figures 1** & **2**).

Based upon the December 2, 2014 meeting between the NYSDEC, USEPA and other state and federal agencies, and RXR-Glen Isle Partners, LLC, the City of Glen Cove IDA, and support team, the potential for arsenic to produce a leachate that exceeds NYSDEC Class GA Ambient Water Quality Standards (AWQS) and Guidance Values (GV) as specified in TOGS 1.1.1 and whether lead found on the Captain's Cove Site would be defined as a hazardous waste under RCRA needs to be evaluated. This work plan details the scope of work for this evaluation.

Scope of Work

The subsurface investigation identified a total of 39 soil borings where one or more depth intervals exceeded the SWCL of 24 or 400 mg/kg, arsenic and/or lead, respectively. PWGC proposes to focus this investigation on soil borings with the highest concentrations of arsenic and/or lead. Specifically, the following samples:

- Lead
  - LT-C-024 (2-4') 4,480 mg/kg
  - CC-C-023 (6-8') 6,030 mg/kg
  - CC-C-029 (8-10') 1,180 mg/kg

  - CC-C-030 (8-10') 983 mg/kg
- Arsenic
  - CC-C-019 (0-2') 1,850 mg/kg
  - CC-C-022 (0-2') 379 mg/kg
  - CC-C-028 (0-2') 253 mg/kg
  - LT-C-003 (0-2') 107 mg/kg
  - LT-C-024 (2-4) 581 mg/kg
  - LT-C-026 (6-8') 63.2 mg/kg
  - LT-C-035 (4-6') 58.6 mg/kg
  - LT-C-056 (2-4') 105 mg/kg
  - LT-G-019 (2-4') 181 mg/kg

*Note LT-C-047 had high concentrations but has been remediated with the removal of underground storage tanks at the site. In addition, LT-R-002 and LT-R-003 had high concentrations of arsenic in the soil but groundwater samples collected from these borings showed dissolved arsenic concentrations below NYSDEC groundwater quality standards (GQS) which indicates that arsenic does not appear to be leaching out of the soil into the groundwater. These locations were not selected for further evaluation.

At each of these soil boring locations, a soil boring will be installed adjacent to the former location. Soil borings will follow the protocol established in the NYSDEC-approved Pre-Construction Confirmatory/Data Gap Subsurface Investigation Work Plan (December 2013) with the following modifications:

1. As the area has previously been cleared for radiological and volatile organic vapor contamination, no further radiological or volatile organic vapor scanning will be performed.
2. As soil samples were previously analyzed for the full suite of constituents, either the SPLP test for arsenic or TCLP test for lead will be performed depending on which constituent is the subject of the boring.

At each of these locations, a handheld x-ray fluorescence (XRF) monitor will be used to confirm the presence of arsenic and/or lead. The interval with the highest field reading from each soil boring will be transferred to laboratory supplied glassware and packed in a cooler with ice and shipped under proper chain-of-custody procedures to a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) certified laboratory. Samples for the lead investigation will be analyzed for total Lead by USEPA Method 6010 and TCLP lead by USEPA Method 1311 and samples for the arsenic investigation will be analyzed for total arsenic by USEPA Method 6010 and SPLP arsenic by USEPA Method 1312.

The SPLP test creates a leachate approximating what would happen from rainfall falling on the material if it was left on the surface of the ground. The leachate is then compared to a standard to determine if it will exceed the discharge limit.

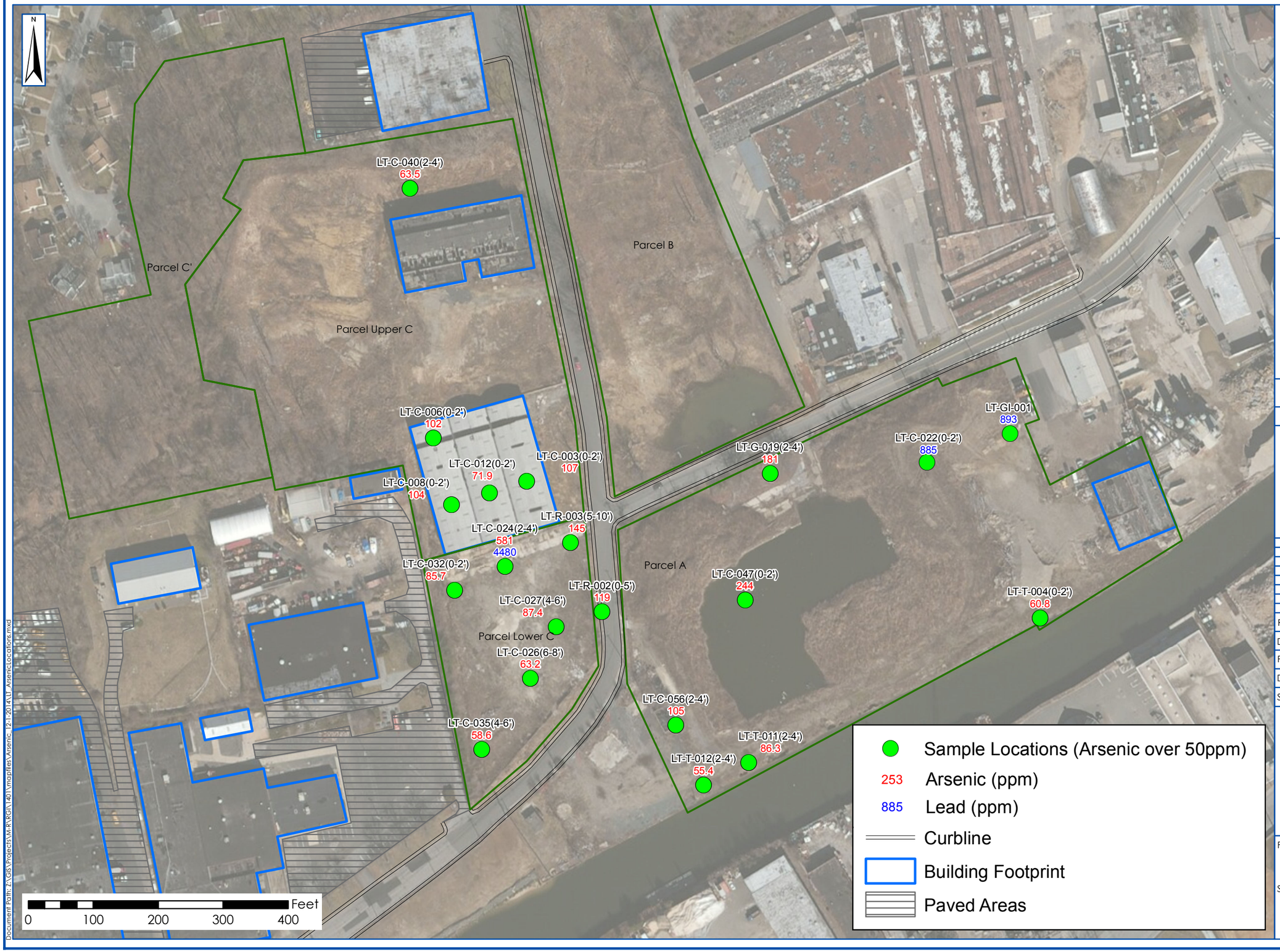
The TCLP test simulates the leachate that could be produced under assumed higher acidic conditions that exist in a landfill and is used to determine if a compound exhibits the characteristics of a hazardous waste.

Data Analysis and Reporting

Upon receipt of analytical data, a letter report will be prepared detailing the methods and findings of the investigation activities performed as outlined in this work plan. Total arsenic and lead results will be compared to the Site Specific SCOs. SPLP analytical results will be compared to the NYSDEC Class GA AWQS and GVs as specified in Technical & Operational Guidance Series (TOGS) 1.1.1; and TCLP results will be

compared to the maximum concentration limits in the Code of Federal Regulations (CFR) 261.24.

FIGURES



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REVISION	DATE	INITIAL	COMMENTS

DRAWING INFORMATION:

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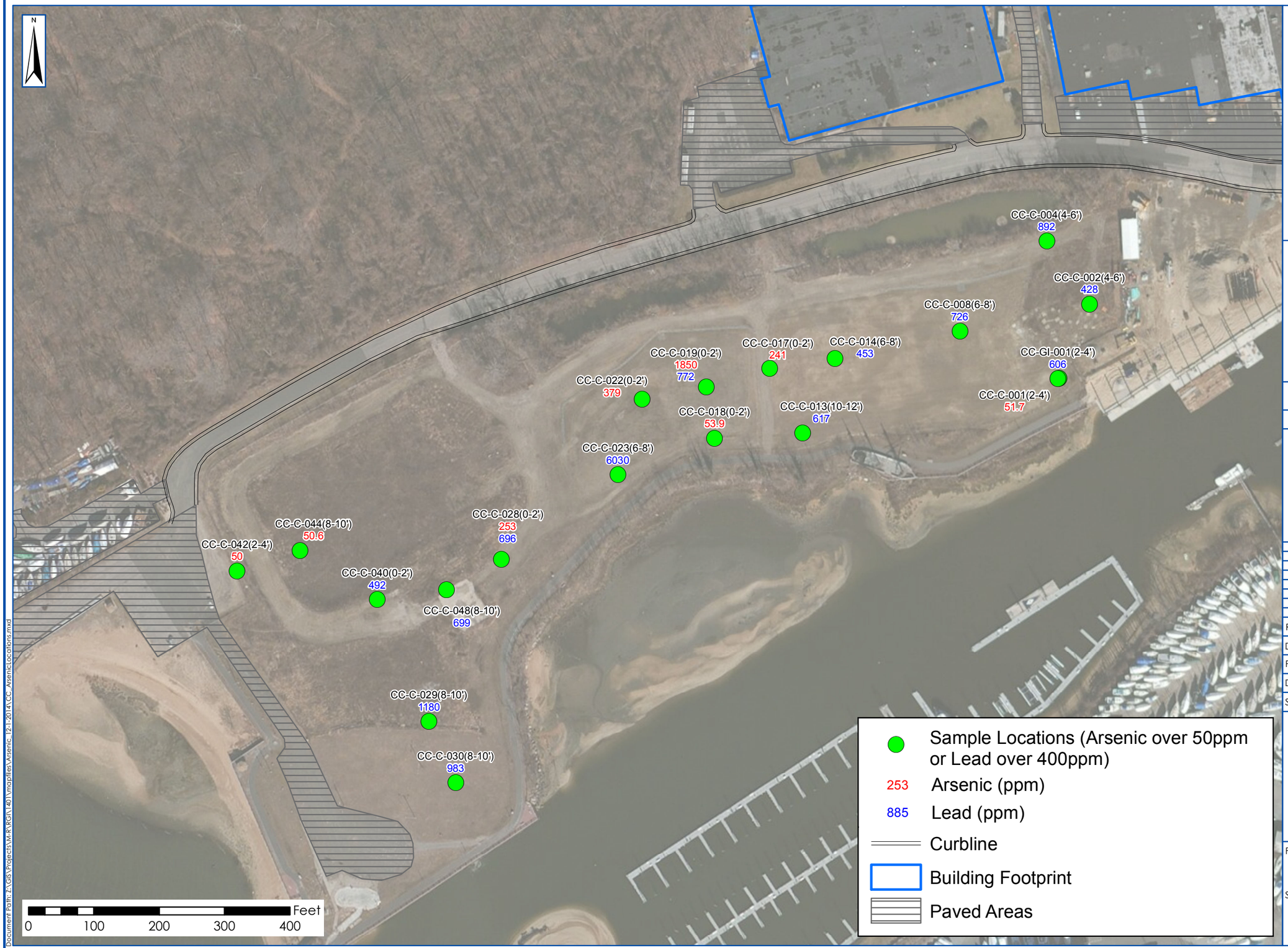
LI TUNGSTEN ARSENIC AND LEAD LOCATIONS

GLEN ISLE

FIGURE NO: 1

SHEET:



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CAPTAIN'S COVE ARSENIC AND LEAD LOCATIONS

GLEN ISLE

FIGURE NO: 1

SHEET: